

A B S T R A C T

A device for thermally insulating at least one undersea pipe (1), the device comprising:

5 • a thermally insulating covering (3₁, 3₃) surrounding said pipe(s);

 • said covering itself being covered by an outer leakproof protective case (2), and said case (2) being made of a flexible or semirigid material suitable for
10 remaining in contact with the outside surface of said insulating covering (3) when it deforms,

 the device being characterized in that:

 • said insulating covering comprises a phase-change material (3₁) confined in at least one container (3₂) made
15 of a flexible or semirigid material that is deformable;
and

 • said container(s) (3₂) being disposed around said pipe(s) (1).